

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

BLUE GENTIAN, et al.,

Plaintiffs,

CIVIL NO. 13-1758 (NLH/AMD)

v.

AMENDED OPINION

TRISTAR PRODUCTS, INC., et
al.,

Defendants.

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HILLMAN, District Judge

Presently before the Court is the issue of whether Gary Ragner, a non-party, should be deemed a co-inventor, pursuant to 35 U.S.C. § 256, of certain patents-in-suit held by Michael Berardi. The Court held a multi-day hearing taking testimony and admitting certain documents and exhibits into evidence. All parties have been well-represented and the Court has benefitted from both the oral advocacy and tutorials at the hearing and the thoughtful and extensive pre- and post-hearing submissions. For the reasons stated below, this Court finds Gary Ragner is a co-inventor of the Michael Berardi patents-in-suit.

BACKGROUND

This case has a lengthy and complicated factual and procedural history. At one time, three different judges presided over suits related to the contested patents and matters

are still pending before the undersigned and a district judge in the Newark vicinage. In lieu of recounting those details, which have been penned by this Court and others numerous times over the years of this litigation, this Court will focus on only the details relevant to the consideration of the matter disposed of in this Opinion.

On July 28, 2017, Defendants moved under Federal Rule of Civil Procedure 42(b) for a hearing on correction of inventorship for the Berardi patents-in-suit pursuant to 35 U.S.C. § 256. On January 30, 2018, this Court granted Defendants' request to hold a hearing to determine whether Gary Ragner should be added as a co-inventor on the Berardi patents-in-suit. Discovery for the hearing ensued and all other pending matters have been staying pending resolution of Defendant's motion.¹

¹ On July 19, 2019, the parties designated several matters, including this case, for mediation: Telebrands Products, Inc., et al. v. National Express, Inc., et al., 1:13-cv-7752; Telebrands Corp. v. Ragner Tech. Corp., et al., 1:15-cv-3163; Ragner Tech. Corp., et al., v. Telebrands Corp., 1:15-cv-8185; Telebrands Corp. v. Ragner Technology Corp. et al., 1:16-cv-3474; Telebrands Corp. v. Ragner Tech. Corp., et al., 1:16-cv-3594; Blue Gentian, LLC v. Tristar Prods., Inc., 1:13-1758; Blue Gentian, LCC, et al. v. Tristar Prods., Inc., 1:13-cv-7099; and Ragner Tech. Corp., et al. v. Berardi, et al., 1:15-cv-7752. In light of the resolution of the pending motion, the parties will be directed to file on the docket a letter within 20 days confirming their intent to proceed to settlement discussions through private mediation.

On September 5-7, 2018, January 29 and 30, 2019, and April 30, 2019, this Court commenced a hearing on correction of inventorship (the "Inventorship Hearing"). At the Inventorship Hearing, the Court received the live testimony of Gary Ragner, Robert de Rochemont, Jr., Margaret Combs, Keith Mirchandani, Ajit Khubani, Bala Iyer, Manish Israni, Cheryl Berardi, and Michael Berardi.

On May 29, 2019, the parties submitted post-hearing briefs. On June 12, 2019, the parties submitted responsive post-hearing briefs. On June 26, 2019, the parties presented closing arguments to the Court. The issues have been fully briefed and are ripe for adjudication.²

As noted, the issue currently before the Court stems from a larger dispute between the Plaintiffs, Blue Gentian, National Express, and Telebrands Corp., and the Defendants, Tristar Products, and Wal-Mart Stores. Plaintiffs market, promote, distribute, and sell a garden hose known as the "XHose." Blue Gentian owns several patents related to the XHose. Defendants also produce and promote a garden hose known as the "Flex~Able Hose." In a matter not currently before the Court, Plaintiffs

² There are two motions pending before the Court: a motion to disregard Plaintiffs' unauthorized June 12, 2019 filing, and a motion for expedited consideration of motion to disregard Plaintiffs' unauthorized June 12, 2019 filing. Through this Opinion and accompanying Order, the Court will deny those motions.

allege that Defendants have infringed on Plaintiffs' patents for the XHose.

In this proceeding, Defendants allege that Gary Ragner, a non-party to this case, co-invented the XHose with Blue Gentian's principal, Michael Berardi. Defendants therefore argue that six of Blue Gentian's patents should be corrected to reflect Gary Ragner's inventorship.³

The bulk of the evidence relevant to determining inventorship comes from a single three to four-hour meeting held on August 23, 2011. The relevant facts before, after, and including this meeting are discussed below.

A. The Expandable Garden Hoses in Question

a. The XHose

The XHose is a lightweight, expandable garden hose. The length and width of the XHose changes depending on the amount of water running through it. The XHose features an elastic inner tube that acts as both a water conduit and a retracting force.

Blue Gentian owns all intellectual property rights in and related to the XHose, including U.S. Patent No. 8,291,941 and U.S. Patent No. 8,291,942. Michael Berardi is listed as the

³ The six patents belonging to Michael Berardi and Blue Gentian are discussed in this opinion. Four of these patents are utility patents: U.S. Patent No. 8,291,941, U.S. Patent No. 8,291,942, U.S. Patent No. 8,479,776, and U.S. Patent No. 8,757,213. Two of these patents are design patents: U.S. Patent No. D722,681, and U.S. Patent No. D724,186.

inventor of the XHose on these patents. Blue Gentian granted National Express an exclusive license to use, sell, import, market, promote and distribute the XHose.

b. The Flex~Able Hose and Pocket Hose

Though not relevant to this opinion, the Court notes that the Flex~Able Hose and Pocket Hose are also lightweight, retractable hoses available for consumer distribution and use.

c. The MicroHose

Gary Ragner and Robert de Rochemont created an expandable hose called the "MicroHose." When the Ragner Technologies team and Michael Berardi met, Ragner and de Rochemont used a prototype of the MicroHose to demonstrate their product. Ragner described this prototype is a "cutdown version" of the MicroHose, featuring a small diameter, elastic vinyl hose, wire coil for biasing, and a nylon or polyester valley cord⁴ epoxied to each end for reinforcement. According to Ragner, the valley

⁴ The MicroHose is similar to the flexible hose found on a common household vacuum cleaner. When collapsed, the circumference of the hose appears uniform. When expanded, the hose forms a three-dimensional wave-like pattern of peaks and valleys. The valley cord winds around the hose through the "valleys," reinforcing the outer strength of the hose to prevent bursting, something all developers known to the Court and many users have experienced with the water pressure typically used with garden hoses. Importantly, Ragner testified that he told Berardi at the August 23 meeting, testimony the Court credits as both credible and consistent with other evidence in the case, that the valley cord was only one way to prevent bursting. Another way was the use of a full outer cover made of fabric.

cord's purpose was both to double the amount of pressure the hose could handle and to help the hose hold its shape. Ragner testified that this demonstrated prototype did not have a separate surgical tube inside it that expanded radially like a balloon (rather, the demonstrated prototype had an elastic tube for water whose radial expansion was constrained by a valley cord), nor did the internal surgical tube in another MicroHose prototype that he discussed with Berardi serve as a conduit for water. To date, no version of the wire-based MicroHose has been sold commercially.

As will be elaborated below, Ragner testified that at the August 23 meeting the attendees discussed "prototype 2" of the MicroHose. The parties agree that this prototype was not physically present at this meeting. According to Ragner, prototype 2 is a vacuum hose with a surgical tube inside. As Ragner described, the internal surgical tube is epoxied to each end of the MicroHose prototype to act as a retracting force.

**B. Michael Berardi's Background and Knowledge
Prior to the August 23 Meeting**

Michael Berardi is an accomplished songwriter and video producer. During his time at CBS Records and Born Music, he copyrighted over 150 songs. Michael Berardi also has significant experience with the direct marketing industry and co-owns Berardi Productions with his wife, Cheryl. Together,

Cheryl and Michael Berardi have produced hundreds of television commercials.

Despite having no technical background, prior to patenting the XHose, Michael Berardi had applied for two patents and taught himself how to edit and produce commercials. Michael Berardi credits his creative thinking and experience working in his father's hardware store for his success inventing new products. During his eleven years as an employee and three years as a manager at his father's hardware store, Michael Berardi testified that he sold and repaired various products, including garden hoses.

In either late July or early August 2011, an acquaintance, Thomas Moran, told Michael Berardi about a potential investment opportunity in a product called the MicroHose. Based on this conversation, Michael Berardi testified that he searched the Internet to learn more about the MicroHose and Ragner Technologies. Through this search, Michael Berardi found a news article about Ragner Technologies that contained a video demonstration of a MicroHose prototype. Michael Berardi testified that after watching the video, he thought the MicroHose was "a very neat product" that "could be a fantastic Direct Response TV product." Michael Berardi watched the video three to four times, zooming in to see parts of the hose demonstration more closely.

Michael Berardi testified that right after watching the video demonstration of the MicroHose, he experienced a "eureka moment" in his community gym. After looking at certain gym equipment, Michael Berardi was struck by the idea of running water through a tube similar to the ones used in the resistance bands at the gym. Michael Berardi testified that "it kind of reminded me I guess maybe of the expanding hose that Ragner had invented" and that he wondered "what would happen if I put water through this?"

Michael Berardi told Cheryl Berardi about his idea for a new hose. Cheryl Berardi responded that they should "not put any energy there" because they already planned to meet with Ragner Technologies. Michael Berardi agreed with Cheryl Berardi's assessment that it would be easier to work with a completed product. Michael Berardi also stated that he was in the middle of pursuing two other large projects during this time period. Ultimately, Michael Berardi did not take any steps to create the hose he imagined following his eureka moment but retained a "nebulous concept" for his hose.

Soon after Berardi watched the online video demonstration of the MicroHose, an agent from Ragner Technologies, Margaret Combs, contacted him about setting up an investment meeting on August 23, 2011. On August 16, 2011, Ragner Technologies sent Michael Berardi and other meeting attendees a username and

password to access a website containing a business plan and three-year cash flow analysis.

C. Gary Ragner's Background and Knowledge Prior to the August 23 Meeting

Gary Ragner is an engineer and co-founder of Ragner Technologies. He holds a Bachelor of Science in physics and a master's degree in mechanical and aerospace engineering. Ragner also completed coursework in fluid dynamics and has seventeen years of experience designing hoses, for both vacuums and outdoor use. Ragner holds several dozen patents for various inventions in the energy, aerospace, and electronic fields, among others.

Since the mid-1990s, Ragner has co-invented with his current business partner, Robert de Rochemont. Together Ragner and de Rochemont approached Combs, a retired business executive, about taking on various administrative, advisory, and management responsibilities within Ragner Technologies. Eventually, Margaret Combs became the CEO and a 10% equity partner in Ragner Technologies.

Beginning in 2004, Ragner and de Rochemont began buying supplies and experimenting with hose designs. Since September 2005, Ragner and de Rochemont have held U.S. Patent No. 6,948,527 for a "pressure-actuated linearly retractable and

extendible hose." On January 30, 2006, Ragner and de Rochemont applied for U.S. Patent No. 8,776,836 for a "linearly retractable pressure hose structure." This patent was granted on July 15, 2014, after being published in 2013. After working on a similar design for a retractable vacuum hose, Ragner testified that he thought this design could apply to garden hoses as well. By August 2011, de Rochemont and Ragner had created between eighteen and twenty prototypes of the MicroHose.

D. The August 23 Meeting

This meeting is particularly important to the determination of co-inventorship. This meeting was the sole interaction between Michael Berardi and Gary Ragner. The Court draws its facts regarding this meeting from the hearing record and documents before it. The parties contest certain details of this meeting. These disputed details will be acknowledged and discussed below.

Michael and Cheryl Berardi hosted this meeting at their home in Palm Beach Gardens, Florida starting around 10:00 AM on August 23, 2011. The attendees were:

- (1) Michael Berardi, principal of Blue Gentian and co-owner of Berardi Productions;
- (2) Cheryl Berardi, co-owner of Berardi Productions and wife of Michael Berardi;
- (3) Ed Kelly, owner of National Express;
- (4) Gary Ragner, CEO and founder of Ragner Technologies;

(5) Robert de Rochemont, former Executive Vice President of Quality Assurance and current CEO of Ragner Technologies;

(6) Margaret Combs, former CEO and current equity partner of Ragner Technologies;

(7) Greg Jansen, a "money finder" for Ragner Technologies; and

(8) Vince Simonelli, a "money finder" for Ragner Technologies.

The parties agree that the primary purpose of this three to four-hour meeting was to secure a \$3 million investment for Ragner Technologies to build machines that could manufacture the MicroHose. Earlier in the week, Combs, de Rochemont, and Ragner had concluded a similar meeting with a different investor in Boca Raton, Florida. Combs testified that the Ragner Technologies team expected that Ed Kelly would be the primary investor.

However, as both parties testified, Kelly, who has since passed away, seemed more interested in pursuing a licensing agreement rather than an investment arrangement. During this meeting, Kelly proposed manufacturing the MicroHose in Taiwan or China to reduce production costs. Ragner opposed this idea and expressed concerns about protecting his intellectual property. After the discussion of licensing, both parties testified that Kelly seemed disinterested in the remainder of the meeting and stayed relatively silent.

The attendees next discussed Ragner Technologies' finances. As Combs presented and explained Ragner Technologies' business plan and cash flow, Michael Berardi testified that he realized the MicroHose would not make a successful direct response TV product ("DRTV product"). Because Ragner Technologies estimated that the cost of manufacturing a single MicroHose would be between ten and twenty dollars, the MicroHose would likely be priced at approximately eighty dollars. Ragner Technologies' manufacturing plan and cost structure made the MicroHouse unattractive in the DRTV market. According to Michael Berardi, a DRTV product would ideally be priced at around thirty dollars.

The attendees then had lunch and turned their discussion to the machinery involved in producing the MicroHose. The Ragner Technologies team used large posters with graphics and photos to illustrate the process for manufacturing the MicroHose, or "Process 17." According to the Ragner Technologies team, these visual aids were meant to explain both the manufacturing process and the internal structure of the MicroHose. Michael Berardi testified that during this portion of the meeting his "eyes started spinning" and Ragner lectured "like a professor" for a half-hour about the production process.

Here, the parties disagree on the other topics the attendees discussed. Ragner testified that he remembers one question being asked: "[Michael Berardi] asked whether we could

replace the spring with elastic." Ragner stated he remembers thinking "that was kind of astute of him to realize that you could replace the retracting means with something else." According to Ragner, he told Michael Berardi that it was possible to use elastic and that the first two prototypes of the MicroHose relied on internal elastic surgical tubes. Ragner also testified that he told Michael Berardi that Ragner Technologies had opted not to continue with this design for the MicroHose because it was not durable enough. Ragner further explained to Michael Berardi that the prototypes with elastic had burst during some of their demonstrations. As Ragner described, this conversation was brief, and Michael Berardi seemed satisfied with Ragner's answers.

Combs testified that she did not hear this conversation, as she was not close enough to Ragner and Michael Berardi. De Rochemont testified that he also did not hear any of this conversation between Ragner and Michael Berardi. De Rochemont has severe hearing loss and "miss[es] most of what people are talking about." Usually, de Rochemont relies on lip reading to understand conversations.

In contrast, Michael Berardi testified that he did not discuss elastic with Ragner, but that Ragner may have mentioned the term "elastomer" during his explanation of the manufacturing process. Michael Berardi testified that he "remember[s]

questions being asked but doesn't remember specific questions."

Cheryl Berardi similarly testified that Michael Berardi did not ask about replacing the spring with elastic and that there was no discussion of earlier prototypes of the MicroHose. Cheryl Berardi also said that she would sometimes leave the meeting to get food or drinks. According to Cheryl Berardi, she remained able to hear the conversation thanks to her home's open concept floor plan.

Near the end of the meeting, the attendees moved outdoors for a live demonstration of the MicroHose prototype. Ragner described this prototype as "a cutdown version of the MicroHose." This version "only had a valley cord in the valley of the hose for reinforcement, and essentially a small diameter vacuum hose, stretch hose, with two ends on it that had fittings for a garden hose."

Michael Berardi testified that he held the hose and used it briefly. Michael Berardi further testified that he asked to keep the prototype. Ragner declined to let Michael Berardi keep the model, saying that it "wasn't really a working prototype because the materials were not strong enough to hold the PSI of the water." During the demonstration, Michael Berardi asked a question about the materials used in the prototype and whether this prototype was a final version of the MicroHose.

The attendees disagree about how well the prototype performed during this demonstration. Ragner testified that it performed "very well" and expanded to about five times its original length before retracting back to its original size. Combs testified that the prototype performed "exactly the way it was supposed to." In contrast, Michael Berardi described the prototype's performance as "disappointing" because "[i]t didn't expand much and it didn't contract much." Cheryl Berardi testified that the hose "didn't move a lot" and "when the water turned off, it did not contract well."

The meeting attendees also dispute the extent to which a non-disclosure agreement (NDA) was discussed and agreed upon. The Ragner Technologies team does not contend that Michael Berardi or Ed Kelly signed an NDA agreement before, during, or after the August 23 meeting. Combs testified that Ragner Technologies typically asked parties to sign an NDA in advance of meetings. However, she testified that because this meeting was scheduled at the last minute, she had not sent an NDA in advance of the August 23 meeting. Combs also testified she did not bring her computer, which contained the up-to-date version of Ragner Technologies' NDA. Instead, Combs asserts that she broached the topic of an NDA at the outset of the meeting. According to Combs, after a tour of the Berardis' home, she asked if the Berardis and Kelly would agree to keep the meeting

confidential and sign an NDA. Combs testified that Michael Berardi and Ed Kelly nodded, and the meeting continued.

Michael Berardi testified that the Ragnar Technologies team knew of the meeting time and location in advance of August 23, 2011. According to Michael Berardi, Combs informed them as they were walking out the door that she would send an NDA. Michael Berardi testified he only shrugged in response because he "knew that there was no way [he] was going to deal with these people." On August 25, 2011, Combs emailed an NDA to Michael Berardi and Ed Kelly. Neither responded to her email nor signed an NDA.

E. Events Following the August 23 Meeting

Michael Berardi testified that he left the August 23 meeting feeling "surprised and disappointed." Michael Berardi testified that he had retained his "nebulous idea" about his own hose and quickly started experimenting to make a cost effective, expandable hose. To build on the "little idea [he] had germinating in [his] head," Michael Berardi purchased supplies for his new hose at Home Depot, Wal-Mart, and Sports Authority and started experimenting a day after meeting with Ragnar Technologies.

During his first attempt at making an expandable garden hose, Michael Berardi testified he "didn't really know . . . what [he] was doing" but had "some concept, some idea of maybe what would happen." For his first attempt at creating his

retractable hose, Michael Berardi purchased a two-and-a-half-inch drainage pipe for pools to serve as the outer layer of his hose. Within a day or two, Michael Berardi had developed his first prototype: a flat vinyl hose with an internal elastic tube. In this version of Michael Berardi's hose, the internal elastic tube was connected to the external vinyl hose at each end and did not expand radially. According to Michael Berardi, "the water in that first one didn't go through the hose . . . it was outside the inner tube." According to Michael Berardi, this prototype ultimately burst during testing.

This failed prototype was "not [Michael Berardi's] final thought process as to how the final product would be made." As Michael Berardi continued to experiment between August 24 and early November 2011, he adjusted the materials used in his hose. As he was unable to find webbing at the hardware and sporting goods stores he initially visited, Michael Berardi ordered it off the Internet and used both PVC pipe and clamps to insert an inner tube into the webbing.

Michael Berardi, with the help of Cheryl Berardi, documented his attempts to build on his "seed idea" for an expandable garden hose suitable for direct TV response marketing. Together, the Berardis created dozens of videos documenting the inventive process of the XHose. Later, when they made a commercial for the XHose, Michael Berardi testified

he "might have subconsciously remembered some of the things that [Gary Ragner] said" in his video for the MicroHose. Michael Berardi continued by explaining that "there are things on mine that are new and things on his [Gary Ragner's] that, you know, were similar." As he testified, many of these experiments failed. However, on November 2, or 3, 2011, Michael Berardi succeeded in making a fifty-foot prototype of what would eventually become the XHose. On November 4, 2011, Michael Berardi and Blue Gentian filed for a patent, which eventually became Patent '941.

When asked about the invention, Cheryl Berardi testified that "nothing that was used to create the XHose was used discussed at that [the August 23] meeting." During the inventorship hearing before the Court, Michael Berardi testified that he did not use anything that Gary Ragner told or showed him when inventing his hose. Ragner testified that Michael Berardi's first prototype was "almost identical to what [he] described to him, minus the wire biasing spring." Ragner was struck by the fact that Michael Berardi used "the same diameter I kind of conveyed to him in prototype 2."

ANALYSIS

A. Subject Matter Jurisdiction and Standing

This Court has subject matter jurisdiction over this matter pursuant to 28 U.S.C. § 1338(a) ("The district courts shall have

original jurisdiction of any civil action arising under any Act of Congress relating to patents, plant variety protection, copyrights and trademarks."). Under 35 U.S.C. § 116, patent applications must include the names of all inventors. If a patent names persons who are not inventors (misjoinder) or omits persons who are inventors (nonjoiner), 35 U.S.C. § 256 "provides two methods for correction: (1) the Director of the United States Patent and Trademark Office may correct the patent upon application of all parties and assignees; or (2) '[t]he court before which such matter is called in question may order correction of the patent on notice and hearing of all the parties concerned.'" Polyzen, Inc. v. RadiaDyne, L.L.C., 2012 WL 4049841 at *2 (E.D.N.C. 2012).

For the Court to have jurisdiction over an action for correction, § 256 requires notice and an opportunity for all parties to be heard. Stark v. Advanced Magnetics, Inc., 119 F.3d 1551, 1553 (Fed. Cir. 1997). In contrast to proceedings before the Director of the United States Patent and Trademark Office, § 256 does not require that all inventors and assignees agree for a district court to have subject matter jurisdiction. In this case, all parties were given notice and an opportunity to be heard.

B. Motion Opinion Standard

"Rule 52(a)(3) provides that the court is not required to state findings or conclusions when ruling on a motion unless the rules provide otherwise." Ambrose v. Krause Publications, Inc., 354 Fed.Appx. 711, 713 (3d Cir. 2009). Nevertheless, when "the district court is presented with conflicting positions of substance as to how it should exercise its discretion . . . it is salutary practice to give the litigants, either orally or in writing, at least a minimum articulation for the reasons of its decision." State Farm Mut. Auto. Ins. Co. v. Midtown Medical Center, Inc., 388 Fed.Appx. 125, 129 (3d Cir. 2010) (quoting Interpace Corp. v. City of Phila., 438 F.2d 401, 404 (3d Cir. 1971)).

This Opinion constitutes the Court's Findings of Fact and Conclusions of Law pursuant to Rule 52(a)(3). See Pierre v. Hess Oil Virgin Islands Corp., 624 F.2d 445, 450 (3d Cir. 1980) (holding that to be in compliance with Rule 52(a), findings of fact and conclusions of law do not need to be stated separately in a court's memorandum opinion); see also Ciolino v. Ameriquest Transp. Services, Inc., 751 F. Supp. 2d 776, 778 (D.N.J. 2010) (issuing an opinion which constituted the court's findings of fact and conclusions of law).

C. Correction of Inventorship Standard and Burden of Proof

In a § 256 proceeding to correct inventorship, "the inventors as named in an issued patent are presumed to be

correct." Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997) (citations and internal quotation marks omitted). In addition to this presumption, courts have also recognized the "temptation for even honest witnesses to reconstruct, in a manner favorable to their own position, what their state of mind may have been years earlier." Id. (citing Amax Fly Ash Corp. v. United States, 514 F.2d 1041, 1047 (1975)). In recognition of this temptation, the claimed inventor must "meet a heavy burden of proving his case by clear and convincing evidence." Au New Haven, LLC v. YKK Corp., 2019 WL 2996473 at *5 (S.D.N.Y. 2019) (citing Finkelstein v. Mardkha, 495 F. Supp. 2d 329, 337 (S.D.N.Y. 2007)).

To satisfy this standard, a claimed inventor must provide evidence corroborating his testimony concerning conception of the invention. Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1358 (Fed. Cir. 2004); Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1461 (Fed. Cir. 1998). Finally, "[t]he determination of whether a person is a joint inventor is fact specific and no bright-line standard will suffice in every case." Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997).

D. Correction of Inventorship

a. Conception

Conception is a term of art in patent law and "the touchstone of inventorship." Burroughs Wellcome Co. v. Barr

Labs., Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994) (citing Sewall v. Walters, 21 F.3d 411, 415 (Fed. Cir. 1994)); Finkelstein, 495 F.Supp.2d at 337. A person can be a joint inventor only if he or she contributes to the conception of the claimed invention. See Eli Lilly, 376 F.3d at 1359.

Courts have recognized that "the line between actual contributions to conception and the remaining, more prosaic contributions to the inventive process that do not render the contributor a co-inventor is sometimes a difficult one to draw." Id. However, the Court is not entirely without guidance as to a working definition of "conception." Conception is "the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Burroughs, 40 F.3d at 1228 (quoting Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.3d 1367, 1376 (Fed. Cir. 1986)). Conception has also been defined as "the complete performance of the mental part of the inventive act." Coleman v. Dines, 754 F.2d 353, 359 (Fed. Cir. 1985).

The mental act of conception is complete when "the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice without extensive research or experimentation." Burroughs, 40 F.3d at 1228; see Sewall, 21 F.3d at 415 ("Conception is

complete when one of ordinary skill in the art could construct the apparatus without unduly extensive research or experimentation."). An idea is sufficiently defined when an inventor has a "specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue." Burroughs, 40 F.3d at 1228 (citing Fiers v. Revel, 984 F.2d 1164, 1169 (Fed. Cir. 1993)). Conception of an invention, therefore, must include every feature of a claimed invention. See Coleman, 754 F.2d at 359. This analysis requires that an inventor can describe his or her invention with particularity. Burroughs, 40 F.3d at 1228.

Plaintiffs argue that Gary Ragner could not have contributed to the conception of the XHose because Michael Berardi had already conceived of a hose with an elastic tube inside a fabric cover during his "eureka moment" in his community gym. However, by his own admission, at the time that Michael Berardi and Gary Ragner met, Michael Berardi did not have a definite and permanent idea of the complete and operative XHose. Instead, he had a "nebulous concept" or "seed idea" for an expandable garden hose derived simply from his exposure to the Ragner Technologies video.

On August 23, 2011, Michael Berardi had not completed the mental part of the inventive act. Moreover, his idea was not so clearly defined that it only took ordinary skill to produce the

XHose. Developing the XHose required extensive experimentation. Michael Berardi testified that it took almost two and a half months of experimentation to create a fifty-foot prototype of the XHose. Michael Berardi did not have a specific, settled idea, but rather a general goal of creating an expandable garden hose that could succeed as a DRTV product. Similarly, Michael Berardi did not yet have solution to a problem, or even a research plan to follow for the creation of the XHose. In fact, he testified that while making his first prototype, he "didn't really know what [he] was doing" and had not settled on a "final thought process" for how to produce his hose.

At the time that Michael Berardi and Gary Ragner met, Michael Berardi's idea for a hose did not yet include every feature of his invention. Michael Berardi's inventive process demonstrates that his idea for the XHose was indeed "nebulous," as he described it. Michael Berardi testified he "didn't really know . . . if [he] was going to put the water through the hose" when he made the first prototype of the XHose. During the two and a half months following his meeting with Ragner, Michael Berardi changed both the materials and the design for the XHose. Furthermore, even if one credits it, Michael Berardi's conversation with his wife following his "eureka moment" does not illustrate that Michael Berardi could describe his invention

with particularity, but rather that he was enthusiastic about the idea.

The Court finds that because Michael Berardi did not have a conception of the XHose prior to the August 23 meeting, it is possible that Gary Ragner contributed to the conception of the XHose.

b. Collaboration

Title 35, United States Code, Section 116 allows for a patented invention to be the work of two or more joint inventors. Ethicon, 135 F.3d at 1461 (citing 35 U.S.C. § 116). "Joint inventorship under section 116 can only arise when collaboration or concerted effort occurs." Eli Lilly, 376 F.3d at 1359. To be added to a patent, an alleged inventor must show that his or her labor were "conjoined with the efforts" of the listed inventors. Id.

While it is difficult to precisely define collaboration for the purpose of joint inventorship, the Federal Circuit in Kimberly-Clark Corp. provides a helpful explanation:

For persons to be joint inventors under Section 116, there must be some element of joint behavior, such as collaboration or working under common direction, one inventor seeing a relevant report and building upon it or hearing another's suggestion at a meeting.

973 F.2d 911, 918 (Fed. Cir. 1992). In other words, "joint inventorship arises only 'when collaboration or concerted effort occurs - that is, when the inventors have some open line of

communication during or in temporal proximity to their inventive efforts.''" Falana v. Kent State Univ., 669 F.3d 1349, 1358 (Fed. Cir. 2012) (quoting Eli Lilly, 376 F.3d at 1359). On the other hand, the Federal Circuit in Kimberly-Clark Corp. further articulated that:

Individuals cannot be joint inventors if they are completely ignorant of what each other has done until years after their individual independent efforts. They cannot be totally independent of each other and be joint inventors.

973 F.2d at 918.

Though joint inventors must have knowledge of his or her co-inventor's efforts, these cases stop short of requiring an intent to invent. In CODA Dev. S.R.O. v. Goodyear Tire & Rubber Co., the Federal Circuit considered whether dismissal of a correction of inventorship claim at the motion to dismiss stage was appropriate. 916 F.3d 1350, 1353 (Fed. Cir. 2019). In that matter, the defendant, through General Motors Corp., expressed an interest in plaintiff's self-inflating tire ("SIT") technology. Id. The plaintiff met with the defendant and allegedly "shared novel, proprietary, and confidential information concerning its SIT technology." Id. at 1354.

At a second meeting a few months later, the plaintiff allowed the defendant to examine a working prototype, which the defendant photographed without the plaintiff's permission. Id. A few months later, the defendant applied for a patent "entitled

'Self-Inflating Tire Assembly.'" Id. The plaintiff claimed this invention was at least in part what the plaintiff had shown the defendant during their meetings. Id. Eleven other patents were issued to the defendant on similar technology thereafter. Id. at 1355. The Federal Circuit opined that this set of allegations was sufficient to support a correction of inventorship claim, and specifically was enough to show collaboration. Id. at 1359-60. In reaching this decision, the Federal Circuit took into account the defendant's prior failures, eagerness to meet with the plaintiff, unauthorized photography of a functional prototype, the timing of a more distance relationship with the plaintiff, and an accusation from a former employee as evidence that the plaintiff's correction of inventorship claim was plausible. Id. at 1359.

While there may be slight factual differences between the situation described in CODA Dev. S.R.O. and the current facts, the Court finds that the facts are sufficiently similar to support a finding of collaboration in this matter. Michael Berardi saw relevant and excruciatingly detailed graphics and photographs at his meeting with Ragner Technologies. These disclosures encompassed Ragner's novel, proprietary, and confidential information concerning Ragner Technologies' MicroHose most, if not all, of which had been set forth in Ragner's pending patent applications.

Though Michael Berardi did not photograph the prototype he was shown, he did hold and use it, even asking to keep it. Berardi clearly relied upon the prototype and Ragner's oral suggestions about alternative methods for building an expandable hose in building his own. After Michael Berardi applied for his patent for the XHose in November 2011, Ragner recognized these inventions as being related to what he had shown Michael Berardi in the August 23 meeting. Moreover, Michael Berardi had neither attempted nor failed to make an expandable hose prior to meeting with Ragner Technologies and he admitted he was eager to meet with Ragner Technologies about its expandable hose.

After the meeting, neither Ed Kelly nor Michael Berardi responded to Margaret Combs' email regarding an NDA, and the parties never communicated again, suggesting a more distant relationship. These facts are not favorable to Plaintiff. The Court credits the testimony of Combs that she had secured an oral commitment from those at the meeting, including Berardi, for the post-meeting signing of an NDA. Her post-meeting conduct corroborates that testimony.

An NDA was never signed not because the parties had not agreed to it but rather because the investor part of the group was not interested in investing in a machine to build a product that could be built more cheaply overseas. And Michael Berardi had no reason to sign an NDA after the fact. Despite the oral

agreement that had been reached, the Court is convinced Berardi left the meeting intent on using what he had learned in it to flesh out his nebulous idea and build a flexible hose for himself.

Plaintiffs argue that because Gary Ragner did not intend to invent a garden hose when he met with Michael Berardi, he could not have collaborated in creating the XHose. Plaintiffs further point to the fact that Ragner did not think that he had invented a new garden hose when he left the August 23 meeting as evidence that he did not collaborate with Michael Berardi. The Court rejects Plaintiff's argument that there must be an intent to invent or expectation of having invented for collaboration, as a legal matter to occur. The issue is not Ragner's intent but Berardi's and his level of knowledge before and after the meeting.

The Court finds on the evidence presented that as a matter of law Gary Ragner collaborated with Michael Berardi to invent the patents in question.

c. Contribution

A person can be listed as an inventor only if he or she contributes to the conception of the claimed invention. Fina Oil & Chem. Co., 123 F.3d at 1473. However, the statute providing for joint inventorship does not set an explicit lower limit on "the quantum or quality of the inventive contribution

required for a person to qualify as a joint inventor." Id.; see 35 U.S.C. § 116. Title 35, United States Code, Section 116 allows for inventors to apply for a patent jointly even though "(1) they did not physically work together or at the same time; (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent." 35 U.S.C. § 116. A joint inventor does not need to make a contribution of the same type or amount of the named inventor, nor does a joint inventor need to make a claim to every claim of a patent. See Finkelstein, 495 F.Supp.2d at 337-38 (quoting Ethicon Inc., 135 F.3d at 1460). A contribution to one claim is enough. See id.

To qualify as a joint inventor, a person's contribution must be "not insignificant in quality, when that contribution is measured against the dimension of the full invention." Fina Oil & Chem. Co., 123 F.3d at 1473. Merely "explaining to the inventors what the state of the art was and supplying a product to them for use in their invention" is not a sufficient contribution to establish joint inventorship. Hess, 106 F.3d at 980 (holding that a person who did "no more than a skilled salesman would do" and did not conduct any research and development work had not contributed to an invention). Similarly, "exercising ordinary skill in the art to reduce an idea to practice" does not constitute a contribution. See

Finkelstein, 495 F.Supp.2d at 416. A person who provides "well-known principles or explains the state of the art without ever having 'a firm and definite idea' of the claimed combination as a whole" cannot be named a joint inventor. Ethicon, 135 F.3d at 1460 (quoting Hess, 106 F.3d at 981).

Defendants do not contend that Ragner physically worked with Michael Berardi in creating the XHose. Defendants similarly do not contend that Ragner and Michael Berardi did their work at the same time. Defendants also do not argue that Ragner and Michael Berardi made the same amount or type of contribution. Defendants instead argue that Michael Berardi contributed nothing to the invention of the XHose. According to Defendants, Ragner contributed at least one of the following concepts to the conception of the XHose: "(1) inner and outer tubes attached only at the ends; (2) a fabric outer tube, and (3) an elastic inner tube that can provide force to retract the hose, including without a metal spring."

Plaintiffs counter that Ragner did not contribute to Michael Berardi's invention.⁵ Plaintiffs highlight that all the MicroHose prototypes Ragner and de Rochemont had created before

⁵ Plaintiffs also assert that the Court is required to engage in claim construction prior to determining inventorship. The Court has declined to do so and need not do so in order to determine that Defendants have met the standard to show that Ragner is a co-inventor of the Berardi patents-in-suit.

August 23 relied on a wire or some type spring for biasing. Plaintiffs deny that the conversation between Ragner and Michael Berardi about replacing the spring component with elastic ever occurred. Plaintiffs emphasize that Michael Berardi never saw, held, or used prototype 2 of the MicroHose, but instead saw a prototype that differs greatly from the XHose. At most, Plaintiffs allege that Ragner contributed valuable information that was already part of the prior art in hose manufacturing.

Plaintiffs argue that the novel information that Ragner claims to have disclosed during the meeting was covered by his previous patent, U.S. Patent No. 6,948,527. Therefore, according to Plaintiffs, everything Ragner described to Michael Berardi was already part of the art. But Berardi and Plaintiffs have asserted that Berardi's patents are distinguished from Ragner Patent '527 by Berardi's inclusion of (1) inner and outer tubes attached only at the ends, (2) a fabric outer tube, and (3) an elastic inner tube that can provide force to retract the hose without a metal spring.

The Court finds that Ragner made a significant contribution to the invention of the XHose, and, in particular, to the conception of at least one claim in each of the six asserted Berardi patents, by conveying these three elements to Berardi in the context of the design for a garden hose. It was not disputed that each of Berardi's four asserted utility patents has one or

more claims that require at least these three elements. Further, in disclosing these elements in the context of Ragner's hose designs - including his disclosure that the spring in those designs could be removed - Ragner (as he testified) conveyed to Berardi a hose with the 'crumpled' aspect depicted in Berardi's two design patent claims, which Berardi himself admitted is the result of how the hose is made. In the course of his meeting with Michael Berardi, Cheryl Berardi, and Ed Kelly, Ragner did more than merely explain the state of the art and supply a product for their use. According to Michael Berardi's testimony, Ragner acted more "like a professor" than a skilled salesman during his explanation of the MicroHose production process. Ragner shared the fruits of his own research and development work on expandable garden hoses for over a half-hour during this investment meeting. He created and presented visual aids to explain both the manufacturing process and internal structure of the MicroHose, exercising more than ordinary skill in the art.

Given his years of experience working on hoses and his eighteen to twenty prototypes of the MicroHose, the Court finds that Ragner had a clear and definite picture of the expandable, retractable garden hose he described as prototype 2. Ragner's decision not to pursue this design further does not reflect a lack of a clear or definite idea. Rather, Ragner's continued

innovation reflects a rejection of a design that, in Ragner's view, exhibited an unacceptable propensity to burst under high water pressure.

Without engaging in claim construction, the Court does not find that everything Ragner disclosed was covered by Patent '527. Ragner testified that he told Michael Berardi it was possible to make an expandable garden hose without using a spring to bias the hose, testimony the Court credits. Michael Berardi (joined by Plaintiffs) interprets Patent '527 as relying on a spring for biasing, whereas Michael Berardi's patents do not. Berardi Patent '941 asserts the absence of a spring as a means of distinguishing itself from Ragner Patent '527. If the presence of a biasing spring is what distinguishes Michael Berardi's patents from Ragner's patent, then by disclosing that a biasing spring was not necessary, Ragner could not have been disclosing information already in the art.

The Court finds that Ragner contributed to the invention of the XHose by sharing information that, according to Michael Berardi's (and Plaintiffs') own understanding and assertions, was not previously available to Michael Berardi about designs for a retractable hose.

d. Corroboration

When considering whether an alleged inventor's testimony is corroborated, a Court must "bear in mind the purpose of

corroboration, which is to prevent fraud, by providing independent confirmation of the inventor's testimony." Kridl v. McCormick, 105 F.3d 1446, 1450 (Fed Cir. 1997); see Mycogen Plant Sci., Inc. v. Monsanto Co., 61 F.Supp.2d 199, 240 (Fed. Cir. 1999). "There is no single formula that must be followed in proving corroboration." Berry v. Webb, 412 F.2d 261, 266 (CCPA 1969). By the same token, there is no single type of corroborating evidence. Finkelstein, 495 F.Supp.2d at 337 (citing Trovan, Ltd. v. Sokymat SA, Irori, 299 F.3d 1292, 1303 (Fed Cir. 2002)).

Typically, courts have allowed for "proof by circumstantial evidence" and have not required "an over-the-shoulder observer or corroboration of every factual issue." Cooper v. Goldfarb, 154 F.3d 1321, 1330 (Fed. Cir. 1998). Corroborating evidence includes contemporaneous documentary evidence, oral testimony of others, and circumstantial evidence. Finkelstein, 495 F.Supp.2d at 337.

Of these types of relevant evidence, only the inventor's testimony must be corroborated before it can be considered. Price v. Symsek, 998 F.2d 1187, 1196 (Fed. Cir. 1993). In contrast, physical exhibits do not require corroboration. Id. The Federal Circuit has referred to documentary or physical evidence as "the most reliable proof that the inventor's testimony has been corroborated." Martek Biosciences Corp. v.

Nutrinova Inc., 579 F.3d 1363, 1375 (Fed. Cir. 2009) (citing Sandt Tech. Ltd. v. Resco Metal & Plastics Corp., 264 F.3d 1344, 1350-51 (Fed. Cir. 2001)). This evidence is particularly reliable because physical evidence is usually “created at the time of conception or reduction to practice,” eliminating the “risk of litigation-inspired fabrication or exaggeration.” Sandt Tech. Ltd., 264 F.3d at 1351.

The Federal Circuit applies a “rule of reason” test to determine whether the inventor’s testimony has been corroborated. Id. The Court will therefore “examine, analyze, and evaluate reasonably all pertinent evidence when weighing the credibility of an inventor’s story.” Holmwood v. Sugavanam, 948 F.2d 1236, 1239 (Fed. Cir. 1991). In Price v. Symsek, the Federal Circuit listed several factors bearing on the inventor’s credibility and whether the inventor’s testimony is adequately corroborated: “(1) the delay between the event and the trial, (2) interest of corroborating witnesses, (3) contradiction or impeachment, (4) corroboration, (5) the corroborating witnesses’ familiarity with details of alleged prior structure, (6) improbability of prior use considering state of the art, (7) impact of the invention on the industry, and (8) relationship between witness and alleged prior user.” 998 F.2d at 1195 n. 3.

Defendants offer several physical exhibits to corroborate Ragner’s testimony. These exhibits include: Ragner

Technologies' business plan, a version of the MicroHose prototype similar to the one used for demonstration at the meeting, a color drawing of Process 17,⁶ instructions for potential investors written by Ragner, and U.S. Patent No. 8,776,836. The business plan, drawing, and instructions all discuss "knitted reinforcement" or "fiber reinforcement" on the outside of the hose. Ragner's Process 17 drawing also references an expandable hose with an elastic tube that provides retracting force. The prototype Ragner actually used to demonstrate the MicroHose was like another prototype presented at the hearing that features an inner and outer tube attached only at the ends, except that in the demonstrated prototype the elastic vinyl tube through which water flowed was surrounded by a valley cord (rather than a full outer fabric tube) that was attached only at the ends.

The Court agrees with Defendants that U.S. Patent No. 8,776,836 corroborates Ragner's testimony. Patent '836, which

⁶ Michael Berardi testified that he was not sure if the process 17 drawing he was shown during his deposition or during this hearing was the exact document he saw during the August 23 meeting. Michael and Cheryl Berardi both testified that the drawing they saw during the meeting at their house was in color. Michael Berardi contests that the document at the meeting did not have pictures or graphics. The exhibit was entered into evidence with both parties' acquiescence. The Court finds on the evidence presented at the hearing that the document entered into evidence is either the graphic shown at the meeting or is not materially different.

was filed in 2006, but not published until 2013, memorializes Ragner's knowledge about retractable garden hoses when he attended the August 23, 2011 meeting. However, because this patent was not published until 2013, this information was not publicly known at the time Ragner and Berardi met and discussed the MicroHose.

Again, without engaging in claim construction, the Court finds that Patent '836 corroborates Ragner's testimony that he had previously designed a hose with these three features: (1) inner and outer tubes connected only at the ends; (2) a fabric outer tube made of nylon or polyester; and (3) an elastic inner tube to provide biasing force without the need for a spring. This prior knowledge corroborates Ragner's testimony that he was prepared to, and did in fact, discuss these features with Michael Berardi at the August 23 meeting. The fact that Patent '836 later entered the public domain does not bar a finding of co-inventorship, especially given that this information was "not contemporaneously available to an ordinary skilled artisan" during the meeting in question. Cf., CardiaQ Valve Techs. v. Neovasc Inc., 708 Fed. Appx. 654, 660 (Fed. Cir. 2017) (unpublished).

Furthermore, Michael Berardi's first prototype also corroborates Ragner's testimony. Ragner testified that he was struck by the similarity between what he had described to

Michael Berardi as prototype 2 and Michael Berardi's first prototype. Both prototypes featured elastic running through the middle of a larger, a two-and-a-half-inch diameter hose. In both prototypes, water could not run through the internal elastic element.

Perhaps even more telling is that this initial prototype did not seem to match Michael Berardi's own alleged conception of his hose. Michael Berardi's first version appears to more closely match Ragner's description of prototype 2 than his original idea for a hose. During his "eureka moment," Michael Berardi contemplated running water through an elastic tube like the ones he saw in his community gym. However, this was not the idea he first implemented. Instead, Michael Berardi started his inventive process with the design that Ragner testified he shared with Michael Berardi just days before.

Because these exhibits are physical evidence created at the time of conception or reduction to practice, there is no risk of litigation-inspired fabrication or exaggeration. The Court finds that these exhibits corroborate Gary Ragner's testimony.

Next, the Court will take into account all the pertinent evidence when weighing the credibility of Ragner's story. Using the factors from Price, the Court will examine whether each witness's testimony corroborates Ragner's invention story.

A long delay between the events in question and testimony may undermine the reliability of an alleged inventor's testimony. See Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1371-72 (Fed. Cir. 1998). However, when an alleged inventor relies on contemporaneous documents and demonstrates a strong recollection of the subject matter, his or her testimony is bolstered. Ceats, Inc. v. Continental Airlines, 2012 WL 12886830 at *7 (E.D. Tex. 2012). In this case, all the corroborating and contradictory witnesses are testifying about events that occurred in 2011 or earlier. It has been several years since this meeting has occurred but, in some cases, the witnesses have had access to contemporaneous documents.

An interested witness is a "named party, an employee of or assignor to a named party, or [a person who] otherwise is in a position where he or she stands to directly and substantially gain by his or her invention being found to have priority over the patent claims at issue." Id. (citing Thomson S.A. v. Quixote Corp., 116 F.3d 1172, 1176 (Fed. Cir. 1999)); see Netscape Comms. Corp. v. ValueClick, Inc., 704 F.Supp.2d 544, 555-56 (E.D. Va. 2010) (discussing the requirements for corroborating interested and disinterested witnesses' testimony). As will be discussed below, several of the witnesses offering corroborating or contradicting testimony are interested witnesses.

1. Margaret Combs' Testimony

Though Ragner Technologies no longer employs Combs, she has retained a 10% equity in the company. Combs is an interested witness for purposes of corroborating Ragner's testimony.

Combs testified that she was not close enough to Ragner and Michael Berardi to overhear a conversation about prototype 2 or any alternative designs for an expandable hose. Combs' testimony neither contradicts nor corroborates Ragner's testimony.

2. Robert de Rochemont's Testimony

De Rochemont is currently the CEO of Ragner Technologies. De Rochemont is an interested witness for the purposes of corroborating Ragner's testimony.

De Rochemont testified that due to his hearing loss, he, like Combs, was not able to hear Ragner and Michael Berardi's conversation. De Rochemont's testimony neither contradicts nor corroborates Ragner's testimony.

3. Keith Mirchandani's Testimony

As an owner of Tristar, Keith Mirchandani is an employee of a named party. Because Tristar also produces an expandable hose, Mirchandani likely has an interest in the outcome of this inventorship hearing. Mirchandani is an interested witness for the purposes of corroborating Ragner's testimony.

Mirchandani testified that Ragner relayed his conversation with Michael Berardi to him later. Mirchandani testified that Ragner told him that Ragner had shared with Michael Berardi that a spring may not be necessary for a retractable hose. However, Mirchandani was not present at the meeting to witness this conversation himself. Furthermore, Mirchandani did not learn of the MicroHose until September 2012 when he began pursuing licensing agreements for an expandable hose. It is therefore unlikely that Mirchandani is familiar with the details of the MicroHose structure or prototype 2.

The Court finds that Mirchandani's corroboration is weak at best.

4. Cheryl Berardi's Testimony

Cheryl Berardi is an employee of a named party, Blue Gentian. Cheryl Berardi does not stand to gain if Ragner is named as a co-inventor of these patents. Cheryl Berardi is therefore an interested witness. Though Cheryl Berardi may not stand to gain if Ragner is named as a co-inventor, she is not without an incentive to reconstruct the events of August 23 in a manner favorable to her position. Cheryl Berardi and Blue Gentian stand to benefit from Michael Berardi remaining the sole inventor of the XHose.

Cheryl Berardi's testimony partially contradicts Ragner's testimony. Cheryl Berardi testified that the meeting attendees

did not discuss elastic or any previous models of the MicroHose during the August 23 meeting at her home. Cheryl Berardi also testified that she was not paying attention to all parts of the meeting and would at times leave the room. The Court finds Cheryl Berardi's contradictory testimony unpersuasive.

5. Michael Berardi's Testimony

Michael Berardi is an employee of a named party, Blue Gentian. However, Michael Berardi does not stand to gain if Ragner is named as a co-inventor of these patents. Michael Berardi is therefore an interested witness as defined above. Like Cheryl Berardi, Michael Berardi also has an interest in reconstructing the events of the August 23 meeting in a manner more favorable to himself. Michael Berardi and Blue Gentian have an interest in remaining the sole owners of the six patents in question.

Michael Berardi's testimony both contradicts and corroborates Ragner's testimony. Michael Berardi contradicted Ragner's testimony by claiming that while they may have discussed "elastomers," at the August 23 meeting, they did not discuss "elastic." However, Michael Berardi also testified that he did ask Ragner about the materials used in the MicroHose prototype during the demonstration portion of the meeting. Michael Berardi stated that while he did remember some questions being asked during the Ragner Technologies team's explanation of

Process 17, he could not remember any specific questions. This account does not preclude the possibility that Ragner's testimony about his conversation with Michael Berardi was accurate. To the extent their testimony conflicts, after observing their demeanor and after reviewing all the evidence as a whole, the Court views Ragner's testimony on this issue the most credible.

Furthermore, while Ragner maintains that Michael Berardi took most, if not all, of his idea for the XHose from Ragner Technologies, Michael Berardi partially concedes that he "may have subconsciously remembered" some elements of Ragner's video for the MicroHose during his inventive process. Michael Berardi also admitted that his original idea for the XHose "kind of reminded me I guess maybe of the expanding hose that Ragner had invented."

Michael Berardi's testimony is particularly relevant for corroboration. As the only inventor currently listed on the six patents in suit, Michael Berardi is very familiar with the details of the technology used in the XHose. Michael Berardi also held and used a prototype of the MicroHose at the August 23 meeting. During the three to four-hour meeting at his house, Michael Berardi listened to Ragner lecture "like a professor" about manufacturing the MicroHose. Michael Berardi is therefore familiar with the details of both inventions.

Ragner Technologies attempted to establish an ongoing business relationship with Ed Kelly and Michael Berardi. Following the August 23 meeting, it became clear, at least to Michael Berardi, that this business relationship would not move forward. As mentioned above, the prospect of a business relationship lasted from late July 2011, to August 23, 2011. When Margaret Combs emailed Ed Kelly and Michael Berardi about a non-disclosure agreement on August 25, 2011, she did not receive a response. Ragner Technologies and Michael Berardi never met again.

After considering all pertinent evidence, the Court finds that Ragner's testimony is adequately corroborated both by physical and circumstantial evidence. Although he was seeking investors not a collaborator, when Gary Ragner made his elaborate and thorough presentation at the August 23 meeting, he conveyed to Michael Berardi key elements of the eventual product known as the XHose, more specifically, as Defendants contend: (1) inner and outer tubes attached only at the ends; (2) a fabric outer tube, and (3) an elastic inner tube that can provide force to retract the hose, including without a metal spring.

When, as here, "inventors have some open line of communication during or in temporal proximity to their inventive efforts" co-inventorship can occur. Falana, 669 F.3d at 1358.

Michael Berardi may be a resourceful and inventive person, but here his creation of the XHose occurred only because of the immediately preceding insight, inventiveness, prior detailed experimentation, design, help, and guidance, albeit short-lived, of Gary Ragner.

Conclusion

Gary Ragner came to the August 2011 meeting well-prepared as an experienced engineer and inventor of flexible and expandable hoses. Ragner had not only experimented with various designs, he had built several prototypes (including one he brought and demonstrated at the meeting) and had taken the further step of designing a machine to build them. To explain the machine is to explain the product. His expertise and years of work were on full display.

In a practical sense, however, Ragner was ill-prepared for the hastily arranged version of "Shark Tank" he encountered in Michael Berardi's home. Berardi, as creative in other milieus as he may have been, hosted the meeting not as an experienced engineer but because of his understandable eagerness to learn about and exploit commercially the product he had seen in the Ragner Technology online video. He left the meeting having been taught something he did not know before the meeting - the key design principles of an expandable and flexible hose as outlined above. He simply went on, in short time, to build, using the

information he had learned, a cheaper and simpler version of the invention Ragner disclosed at the meeting and one, importantly, containing each of its key components.

Accordingly, for the reasons discussed above, Defendants have shown through clear and convincing evidence that Gary Ragner contributed to the conception of the XHose and at least one claim in each of the asserted Berardi patents and should be named an co-inventor. The Court will grant Defendants' motion for a correction of inventorship.

An accompanying Order will be entered directing a correction of inventorship for the patents in suit. Orders denying Defendants' motion to disregard Plaintiffs' unauthorized June 12, 2019 filing, and motion for expedited consideration of motion to disregard Plaintiffs' unauthorized June 12, 2019 filing will also be entered.

Date: August 12, 2021
At Camden, New Jersey

s/ Noel L. Hillman
NOEL L. HILLMAN, U.S.D.J.